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(54) Title: GRIT TRAP

(57) Abstract: A vortex grit trap comprising a generally vertically extending tank (11) of circular cross-section including a separation zone (12) having an inlet (14) and an outlet (15) for liquid flow to and from the tank, and in which liquid is circulated about a longitudinal axis of the tank, and, a grit collection zone (13) positioned beneath the separation zone (12) in use, the trap being characterised by a generally circular tank divider (18) centred on the vertical longitudinal axis of the tank and extending transverse thereto, the divider defining a notional boundary between the separation and collection zones of the tank and being of smaller diameter than the adjacent region of the tank so as to define with the adjacent tank wall an annulus (23) through which grit passes from the separation zone to the collection zone in use, and, means (18, 22, 25) for generating a cloud of gas bubbles migrating in use upwardly through substantially the whole of said annulus whereby substantially all grit passing from the separation zone into the collection zone passes through the upwardly moving bubble cloud in said annulus so that organic solids settling with the grit are displaced upwardly by the bubbles into the flow within the separation zone while the grit passes through the bubble cloud in the annulus and into the collection zone. There is also disclosed a method of separating grit from an aqueous sewage flow.



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